

IN THE CLAIMS:

1. (Currently Amended) An axle suspension for a rigid vehicle axle, the axle suspension comprising:

a four-point connecting rod arranged above the vehicle axle;

two vehicle axle joints connecting two points of said four-point connecting rod to said vehicle axle in an articulated manner;

two vehicle body joints connecting two points of said four-point connecting rod to a vehicle body in an articulated manner, said two vehicle axle joints being located at spaced locations from one another in a transverse direction of the vehicle and said two vehicle body joints being located at spaced locations from one another in a transverse direction of the vehicle;

an first axle strut extending in a longitudinal direction of the vehicle arranged on a first side of the vehicle for guiding the axle, said first axle strut connecting said vehicle axle to said vehicle body in a vertically movable manner;

an second axle strut extending in a longitudinal direction of the vehicle arranged on a second side of the vehicle for guiding the axle, said second axle strut connecting said vehicle axle to said vehicle body in a vertically movable manner;

a first spring assembly unit arranged between the vehicle axle and the vehicle body for spring suspension;

a second spring assembly unit arranged between the vehicle axle and the vehicle body for spring suspension;

a first molecular joint connecting said first axle strut to said vehicle axle at an

articulation point, said first axle strut having a free end extending beyond said articulation point,
said first spring assembly being positioned at said first axle strut free end;

25
C a second molecular joint connecting said second axle strut to said vehicle axle at an
articulation point, said first axle strut having a free end extending beyond said articulation point,
said second spring assembly being positioned at said second axle strut free end.

2. (Currently Amended) An axle suspension in accordance with claim 1, further comprising another spring assembly unit arranged between the vehicle axle and the vehicle body for spring suspension; wherein said first axle strut free end has having a first mount for said first spring assembly unit and said second axle strut free end has having a second mount for said anothersecond spring assembly unit.

3. (Previously Amended) An axle suspension in accordance with claim 2, wherein said first mount includes a joint and said second mount includes a joint.

4. (Previously Amended) An axle suspension in accordance with claim 3, wherein the joints are ball-and-socket joints.

5. (Previously Amended) An axle suspension in accordance with claim 1, further comprising a first shock absorber connected between said first axle strut and the vehicle body and a second shock absorber connected between said second axle strut and the vehicle body,

said first axle strut having a first mount for said first shock absorber and said second axle strut
5 having a second mount for said second shock absorber.

6. (Previously Amended) An axle suspension in accordance with claim 1, further comprising:

a third molecular joint connecting said first axle strut to said vehicle body; and
a forth molecular joint connecting said second axle strut to said vehicle body.

7. (Previously Amended) An axle suspension in accordance with claim 6, wherein said
third molecular joint connecting said first axle strut to said vehicle body has a stiffer joint
characteristic than said first molecular joint connecting said first axle strut to said vehicle axle
and said forth molecular joint connecting said second axle strut to said vehicle body has a stiffer
5 joint characteristic than said second molecular joint connecting said second axle strut to said
vehicle axle.

8. (Currently Amended) An axle suspension in accordance with claim 1, wherein said
spring assembly unit is arranged in front of said vehicle axle and another spring assembly unit
is arranged behind said vehicle axle.

9. (Currently Amended) An axle suspension in accordance with claim 1, wherein said
spring assembly unit is arranged in front of said vehicle axle and another spring assembly unit

is arranged behind said vehicle axle.

10. (Original) An axle suspension in accordance with claim 5, wherein said first mount includes a joint and said second mount includes a joint.

11. (Currently Amended) An axle suspension for a rigid vehicle axle of air-suspension utility vehicles, the axle suspension comprising:

a four-point twistable connecting member arranged above the vehicle axle;

two vehicle axle joints connecting two points of said four-point connecting member to said vehicle axle in an articulated manner;

two vehicle body joints connecting two points of said four-point connecting member to a vehicle body in an articulated manner, said two vehicle axle joints being located at spaced locations from one another in a transverse direction of the vehicle and said two vehicle body joints being located at spaced locations from one another in a transverse direction of the vehicle;

an first axle strut extending in a longitudinal direction of the vehicle arranged on a first side of the vehicle for guiding the axle, said first axle strut connecting said vehicle axle to said vehicle body in a vertically movable manner;

an second axle strut extending in a longitudinal direction of the vehicle arranged on a second side of the vehicle for guiding the axle, said second axle strut connecting said vehicle axle to said vehicle body in a vertically movable manner;

a spring assembly unit arranged between the vehicle axle and the vehicle body for spring

suspension;

another spring assembly unit arranged between the vehicle axle and the vehicle body for spring suspension;

20

a further spring assembly unit arranged between the vehicle axle and the vehicle body for spring suspension;

a first molecular joint connecting said first axle strut to said vehicle axle; and

a second molecular joint connecting said second axle strut to said vehicle axle.

12. (Original) An axle suspension in accordance with claim 11, wherein said first axle strut has a first mount for said spring assembly unit and said second axle strut has a second mount for said another spring assembly unit.

13. (Original) An axle suspension in accordance with claim 12, wherein said first mount includes a joint and said second mount includes a joint.

14. (Original) An axle suspension in accordance with claim 13, wherein the joints are ball-and-socket joints.

15. (Original) An axle suspension in accordance with claim 11, further comprising a first shock absorber connected between said first axle strut and the vehicle body and a second shock absorber connected between said second axle strut and the vehicle body, said first axle

5 strut having a first mount for said first shock absorber and said second axle strut having a second mount for said second shock absorber.

16. (Original) An axle suspension in accordance with claim 15, wherein said first mount includes a ball-and-socket joint and said second mount includes a ball-and-socket joint.

C/ 17. (Original) An axle suspension in accordance with claim 11, further comprising:
a third molecular joint connecting said first axle strut to said vehicle body; and
a forth molecular joint connecting said second axle strut to said vehicle body.

5 18. (Original) An axle suspension in accordance with claim 17, wherein said third molecular joint connecting said first axle strut to said vehicle body has a stiffer joint characteristic than said first molecular joint connecting said first axle strut to said vehicle axle and said forth molecular joint connecting said second axle strut to said vehicle body has a stiffer joint characteristic than said second molecular joint connecting said second axle strut to said vehicle axle.

19. (Currently Amended) An axle suspension in accordance with claim 11, wherein said spring assembly unit is arranged in front of said vehicle axle and said another spring assembly is arranged behind the said vehicle axle.

20. (Currently Amended) An axle suspension in accordance with claim ~~11~~ 15, wherein said spring assembly unit is arranged in front of said vehicle axle and said another spring assembly is arranged behind the said vehicle axle.

Please add the following new claims:

21. (New) An axle suspension for a rigid vehicle axle, the axle suspension comprising:
a four-point connecting rod arranged above the vehicle axle;
two vehicle axle joints connecting two points of said four-point connecting rod to said vehicle axle in an articulated manner;
two vehicle body joints connecting two points of said four-point connecting rod to a vehicle body in an articulated manner, said two vehicle axle joints being located at spaced locations from one another in a transverse direction of the vehicle and said two vehicle body joints being located at spaced locations from one another in a transverse direction of the vehicle;
an first axle strut extending in a longitudinal direction of the vehicle arranged on a first side of the vehicle for guiding the axle, said first axle strut connecting said vehicle axle to said vehicle body via a joint at a first front articulation point for movement of said first axle strut relative to said vehicle body vertically;
an second axle strut extending in a longitudinal direction of the vehicle arranged on a second side of the vehicle for guiding the axle, said second axle strut connecting said vehicle axle to said vehicle body via a joint at a second front articulation point for movement of said second axle strut relative to said vehicle body vertically;

a spring assembly unit arranged between the vehicle axle and the vehicle body for spring suspension;

20 a first molecular joint connecting said first axle strut to said vehicle axle at an articulation point, said first axle strut having a direction toward a middle of the vehicle in an extent of said first axle strut from said front articulation point toward a rear of the vehicle; and

CN a second molecular joint connecting said second axle strut to said vehicle axle at an articulation point, said second axle strut having a direction toward a middle of the vehicle in an extent of said second axle strut from said front articulation point toward a rear of the vehicle.

22. (NEW) An axle suspension for a rigid vehicle axle of air-suspension utility vehicles, the axle suspension comprising:

a four-point twistable connecting member arranged above the vehicle axle;

5 two vehicle axle joints connecting two points of said four-point connecting member to said vehicle axle in an articulated manner;

two vehicle body joints connecting two points of said four-point connecting member to a vehicle body in an articulated manner, said two vehicle axle joints being located at spaced locations from one another in a transverse direction of the vehicle and said two vehicle body joints being located at spaced locations from one another in a transverse direction of the vehicle;

10 an first axle strut extending in a longitudinal direction of the vehicle arranged on a first side of the vehicle for guiding the axle, said first axle strut connecting said vehicle axle to said vehicle body in a vertically movable manner;

an second axle strut extending in a longitudinal direction of the vehicle arranged on a second side of the vehicle for guiding the axle, said second axle strut connecting said vehicle axle to said vehicle body in a vertically movable manner;

a spring assembly unit arranged between the first axle strut and the vehicle body and behind the axle, with respect to a direction of travel of the vehicle, for spring suspension;

another spring assembly unit arranged between the second axle strut and the vehicle body and behind the axle, with respect to a direction of travel of the vehicle, for spring suspension;

a first molecular joint connecting said first axle strut to said vehicle axle; and
a second molecular joint connecting said second axle strut to said vehicle axle.

23. (NEW) An axle suspension for a rigid vehicle axle of air-suspension utility vehicles, the axle suspension comprising:

a four-point twistable connecting member arranged above the vehicle axle;

two vehicle axle joints connecting two points of said four-point connecting member to said vehicle axle in an articulated manner;

two vehicle body joints connecting two points of said four-point connecting member to a vehicle body in an articulated manner, said two vehicle axle joints being located at spaced locations from one another in a transverse direction of the vehicle and said two vehicle body joints being located at spaced locations from one another in a transverse direction of the vehicle;

an first axle strut extending in a longitudinal direction of the vehicle arranged on a first

side of the vehicle for guiding the axle, said first axle strut connecting said vehicle axle to said vehicle body in a vertically movable manner;

an second axle strut extending in a longitudinal direction of the vehicle arranged on a second side of the vehicle for guiding the axle, said second axle strut connecting said vehicle axle to said vehicle body in a vertically movable manner;

15 a forward spring assembly unit arranged between the vehicle axle and the vehicle body and in front of the axle, with respect to a direction of travel of the vehicle, for spring suspension;

20 another forward spring assembly unit arranged between the vehicle axle and the vehicle body and behind the axle, with respect to a direction of travel of the vehicle, for spring suspension;

a rear spring assembly unit arranged between the vehicle axle and the vehicle body and rearwardly of the axle, with respect to a direction of travel of the vehicle, for spring suspension;

25 another rear spring assembly unit arranged between the vehicle axle and the vehicle body and rearwardly of the axle, with respect to a direction of travel of the vehicle, for spring suspension;

a first molecular joint connecting said first axle strut to said vehicle axle; and

a second molecular joint connecting said second axle strut to said vehicle axle.

24. (NEW) An axle suspension for a rigid vehicle axle of air-suspension utility vehicles, the axle suspension comprising:

a four-point twistable connecting member arranged above the vehicle axle;

two vehicle axle joints connecting two points of said four-point connecting member to
5 said vehicle axle in an articulated manner;

two vehicle body joints connecting two points of said four-point connecting member to
a vehicle body in an articulated manner, said two vehicle axle joints being located at spaced
locations from one another in a transverse direction of the vehicle and said two vehicle body
joints being located at spaced locations from one another in a transverse direction of the vehicle;

an first axle strut extending in a longitudinal direction of the vehicle arranged on a first
side of the vehicle for guiding the axle, said first axle strut connecting said vehicle axle to said
vehicle body in a vertically movable manner;

an second axle strut extending in a longitudinal direction of the vehicle arranged on a
second side of the vehicle for guiding the axle, said second axle strut connecting said vehicle
15 axle to said vehicle body in a vertically movable manner;

a spring assembly unit arranged between the first axle strut and the vehicle body for
spring suspension, said first axle strut having a first mount for said spring assembly unit;

another spring assembly unit arranged between the second axle strut and the vehicle
body for spring suspension, said second axle strut having a second mount for said another
20 spring assembly unit;

a first shock absorber connected between said first axle strut and said vehicle body, said
first axle strut having a first shock absorber mount for said first shock absorber, said first mount
for said spring assembly unit being spaced from said first shock absorber mount along said first

axle strut;

25

a second shock absorber connected between said second axle strut and the vehicle body, said second axle strut having a second shock absorber mount for said second shock absorber, said second mount for said spring assembly unit being spaced from said second shock absorber mount along said second axle strut;

a first molecular joint connecting said first axle strut to said vehicle axle; and

a second molecular joint connecting said second axle strut to said vehicle axle.

30

25. (New) An axle suspension for a rigid vehicle axle, the axle suspension comprising:
a four-point connecting rod arranged above the vehicle axle;

two vehicle axle joints connecting two points of said four-point connecting rod to said vehicle axle in an articulated manner;

5

two vehicle body joints connecting two points of said four-point connecting rod to a vehicle body in an articulated manner, said two vehicle axle joints being located at spaced locations from one another in a transverse direction of the vehicle and said two vehicle body joints being located at spaced locations from one another in a transverse direction of the vehicle;

10

an first axle strut extending in a longitudinal direction of the vehicle arranged on a first side of the vehicle for guiding the axle, said first axle strut connecting said vehicle axle to said vehicle body in a vertically movable manner;

an second axle strut extending in a longitudinal direction of the vehicle arranged on a second side of the vehicle for guiding the axle, said second axle strut connecting said vehicle

axle to said vehicle body in a vertically movable manner;

15

a spring assembly unit arranged between the vehicle axle and the vehicle body for spring suspension;

a first molecular joint connecting said first axle strut to said vehicle axle;

a second molecular joint connecting said second axle strut to said vehicle axle;

a third molecular joint connecting said first axle strut to said vehicle body; and

20

a forth molecular joint connecting said second axle strut to said vehicle body, wherein said third molecular joint connecting said first axle strut to said vehicle body has a stiffer joint characteristic than said first molecular joint connecting said first axle strut to said vehicle axle and said forth molecular joint connecting said second axle strut to said vehicle body has a stiffer joint characteristic than said second molecular joint connecting said second axle strut to said vehicle axle.

25